Quan Tran Hong

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Biography: *Strong foundation in software engineering, now interest expanding into machine learning, computer vision, and 3D Data processing. Seeking a Machine Learning Engineer / AI Software Engineer role where I can apply my expertise in backend system design and AI-driven solutions to build innovative applications.*

Education

Open Institute of Technology,
Master's Degree in Responsible Artificial Intelligence

Sept 2024 – Present
Remote

- Accumulated GPA (First Semester): 4.0/4.0
- **Relevant Coursework:** Computer Vision, Machine Learning, Natural Language Processing, Data Analytics and Visualization

Auckland University Of Technology,
Bachelor of Computer and Information Science

Sept 2019 – Aug 2023
Vietnam

- High Merit - GPA: 3.48/4.0 (Transcript 🔗)
- Dual Degree Program with Ho Chi Minh University of Science

Experience

Fullerton Health Group, *Middle Software Engineer*

Hybrid, Vietnam
Feb 2023 – Oct 2023

- Led a team of three junior developers on internal projects, delivering the Claims Portal.
- Migrated raw SQL statements to ORM Sequelize, significantly improving query performance two times.
- Apply back-end coding standards and testing practices to team, mentoring team members to improve code maintainability and readability.
- Designed and implemented server-side large functionalities, such as automated email notifications and PDF claims file exports.

South Asia Services, *Junior Full-stack Engineer*

Remote, Vietnam
Dec 2021 - Feb 2023

- Redesigned the backend system by migrating from ExpressJS to NestJS microservices, improving scalability for handling 100K+ requests/day.
- Redesigned the Oracle SQL database schema, optimizing relationships and improving query performance, reduced query execution time from 1s to 100ms.
- Developed comprehensive authentication and authorization features using Keycloak, integrating single sign-on (SSO) capabilities and role-based access control (RBAC).
- Implemented functional UI components using React, focusing on integrating data fetching and state management with React Query, and transitioned from Redux storage.
- Collaborated with stakeholders to gather requirements, conduct sprint planning, and refine project deliverables. Actively participated in code reviews and maintained documentation to ensure high code quality standards.

Zigvy Corporation, *Intern/ Fresher Frontend Engineer*

Onsite, Vietnam
April 2021 – Oct 2021

- Design and integrate UI/UX elements and apply new UI functionalities into deployed projects.
- Maintained and improved operational efficiency of the HR Forte project, managing employee information and payroll systems.
- Developed and implemented a customization column feature in the dashboard, empowering users to generate Excel reports based on their specific requirements.

Technical Skills

Data Science:

- Proficient in data manipulation and analysis with NumPy and Pandas.
- Experience with data visualization tools like Matplotlib and Tableau.
- Familiar with machine learning frameworks including Scikit-Learn, PyTorch, and TensorFlow.
- Understanding of MLOps practices for building AI application pipelines.
- Knowledge in 3D data processing and analysis, with familiarity in libraries such as Open3D, PyTorch3D, or Colmap.

Programming Languages:

- Proficient in Python, JavaScript, and TypeScript.
- Minor working knowledge of Go, Java, and C++.

Backend Development:

- Skilled in developing RESTful APIs and server-side applications using NestJS and Express.
- Extensive experience with relational databases (PostgreSQL, MySQL) and NoSQL databases (MongoDB).
- Proficient in ORM tools including Sequelize, Prisma, and Mongoose.
- Competent in writing unit tests using Jest.

Frontend Development:

- Experience in building UI/UX components and functionality with React.
- Familiar with build tools like Vite and Webpack.
- Experience with styling using SCSS and UI component libraries like Ant Design and Material-UI.

Cloud and DevOps:

- Experience deploying applications on AWS services including EC2, S3, and Lambda.
- Proficient with Docker for containerizing applications.
- Hands-on experience setting up CI/CD pipelines using tools like GitHub Actions and Jenkins.

Certifications & Training

AI Vietnam Program Graduate (Class of 2024)   **Remote** - link ☑
All-in-One 2024 Data Science and Artificial Intelligence program

Cybersoft Academy Tranning Bootcamp, Ho Chi Minh City   **Onsite** - link ☑
Completed Bootcamp Full-stack Website Javascript over 6-month period

AWS Certified Cloud Practitioner   **AWS certified** - link ☑

Deep Learning Specialization - DeepLearning.AI   **Cousera** - link ☑

IBM Data Science Professional Certificate   **Cousera** - link ☑

Applied Data Science Lab - DS Program Certificate   **WorldQuant** - link ☑